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Alexandria, VA 22313-1450RECEIVED  
MAR 03 2004AFI 2854  
Docket No.: 600.1095  
Date: February 20, 2004

In re application of: **Hendrik FRANK**  
Serial No.: 09/696,812  
Filed: 10/26/2000  
For: **SHEET TRANSPORT SYSTEM FOR A ROTARY PRINTING PRESS**

Sir:

Transmitted herewith is an **APPELLANT'S BRIEF UNDER 37 C.F.R. 1.192** - in Triplicate (11 pages each) in the above-identified application.


- ☐ Small entity status under 37 C.F.R. 1.9 and 1.27 has been previously established.  
☐ Applicants assert small entity status under 37 C.F.R. 1.9 and 1.27.  
☒ No fee for additional claims is required.  
☐ A filing fee for additional claims calculated as shown below, is required:

(Col. 1)		(Col. 2)	SMALL ENTITY		OR	LARGE ENTITY	
FOR:	REMAINING	HIGHEST	RATE	FEE		RATE	FEE
	AFTER	PREVIOUSLY	PRESENT				
	AMENDMENT	PAID FOR					
TOTAL CLAIMS	* Minus**	=	0	x \$ 9		x \$ 18	\$
INDEP. CLAIMS	* Minus***	=	0	x \$ 40		x \$ 80	\$
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEP. CLAIM				+ \$135		+	\$270 \$

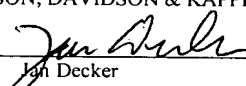
TOTAL: \$ OR TOTAL: \$

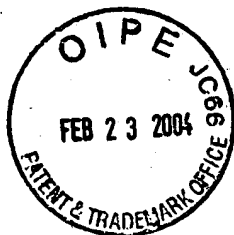
- \* If the entry in Co. 1 is less than the entry in Col. 2, write "0" in Col. 3.  
\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space.  
\*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, write "3" in this space.

- ☐ Also transmitted herewith are:  
☐ Petition for extension under 37 C.F.R. 1.136  
☐ Other:
- ☒ Check(s) in the amount of **\$330.00** is/are attached to cover:  
☐ Filing fee for additional claims under 37 C.F.R. 1.16  
☐ Petition fee for extension under 37 C.F.R. 1.136  
☒ Other: **Appeal Brief Fee**
- ☒ The Assistant Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-0552.
- ☒ Any filing fee under 37 C.F.R. 1.16 for the presentation of additional claims which are not paid by check submitted herewith.
- ☒ Any patent application processing fees under 37 C.F.R. 1.17.
- ☒ Any petition fees for extension under 37 C.F.R. 1.136 which are not paid by check submitted herewith, and it is hereby requested that this be a petition for an automatic extension of time under 37 CFR 1.136.

  
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I hereby certify that the documents referred to as attached therein and/or fee are being deposited with the United States Postal Service as "first class mail" with sufficient postage in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" on February 20, 2004.  
DAVIDSON, DAVIDSON & KAPPEL, LLC

BY:   
Jan Decker



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Re: Application of: Hendrik FRANK  
Serial No.: 09/696,812  
Filed: 10/26/2000  
For: SHEET TRANSPORT SYSTEM FOR A  
ROTARY PRINTING PRESS  
Art Unit: 2854  
Examiner: Ren Yan

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**MAR 03 2004**

Mail Stop: APPEAL  
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P.O. Box 1450  
Alexandria, VA 22313-1450

February 20, 2004

**APPELLANTS' BRIEF UNDER 37 C.F.R. § 1.192**

Sir:

Appellants submit this brief for the consideration of the Board of Patent Appeals and Interferences (the "Board") in support of their appeal of the Final Rejection dated August 26, 2002 in this application. An original and two copies of this brief are submitted herewith. The statutory fee of \$330.00 is paid concurrently herewith.

**1. REAL PARTY IN INTEREST**

The real party in interest is Heidelberger Druckmaschinen AG, a German corporation having a place of business at Kurfuersten-Anlage 52-60, D-69115 Heidelberg, Germany, the assignee of the entire right, title and interest in the above-identified patent application. The invention was assigned by inventor Frank to

Heidelberger Druckmaschinen AG. The assignment was recorded on February 5, 2001 at reel 011504/ frame 0021.

## 2. RELATED APPEALS AND INTERFERENCES

Appellants, their legal representatives, and assignee are not aware of any appeal or interference that directly affects, will be directly affected by, or will have a bearing on the Board's decision in this appeal.

## 3. STATUS OF CLAIMS

Claims 2 to 14 are pending. Claims 1 and 15 to 20 have been cancelled. Claims 2 to 14 have been finally rejected as per the Final Office Action dated August 26, 2002.

The rejection to claims 2 to 14 thus is appealed. A copy of appealed claims 2 to 14 is attached hereto as Appendix A.

## 4. STATUS OF AMENDMENTS AFTER FINAL

A Response to the Final Office Action which did not amend any claims was filed on November 22, 2002 and was entered by the Advisory Action of December 19, 2002.

## 5. SUMMARY OF THE INVENTION

The present invention is drawn to a rotary printing press (See e.g., Specification, page 4, line 24, see e.g. Fig. 1) with a sheet transport system (See e.g., Specification, page 4, line 26, see e.g. Reference character 1 in Fig. 1). The transport system comprises two cylinders forming a nip (See e.g., Specification, page 4, lines 24 to 26, Fig. 1, Reference characters 50 and 51) with a first rail (See e.g., Specification, page 5, lines 9 to 14, Fig. 2, Reference character 6a) configured on one side of a sheet transport path (See e.g., Specification, page 5, lines 6 to 10, Fig. 2) and a second rail (See e.g., Specification, page 5, lines 9 to 14, Fig. 2, Reference character 6b) configured on the other side of the sheet transport path (See e.g., Specification, page 5, lines 6 to 10, Fig. 2).

At least one first driven gripper (See e.g., Specification, page 5, lines 19 to 23, Fig. 2, Reference character 20a) is guided on the first rail (See e.g., Specification, page 5, lines 19 to 23, Fig. 2, Reference character 6a) and at least one second driven gripper (See e.g., Specification, page 5, lines 19 to 23, Fig. 2, Reference character 20b) being guided on the second rail (See e.g., Specification, page 5, lines 19 to 23, Fig. 2, Reference character 6b). The at least one first gripper (See e.g., Specification, page 5, lines 19 to 23, Fig. 2, Reference character 20a) and the at least one second gripper (See e.g., Specification, page 5, lines 19 to 23, Fig. 2, Reference character 20b) pulling a sheet (See e.g., Specification, page 5, lines 22 to 26, Fig. 2, Reference character 2) to be conveyed in a feed direction (See e.g., Specification, page 5, lines 19 to 23, Fig. 2, arrow). The sheet (See e.g., Specification, page 5, lines 22 to 26, Fig. 2, Reference character 2) has a first side edge (See e.g., Specification, page 7, lines 3 to 7, Fig. 4, Reference character 3), a second side edge (See e.g., Specification, page 7, lines 3 to 7, Fig. 4, Reference character 3) and a front end (See e.g., Specification, page 7, lines 8 to 9, Fig. 4, Reference character 2) with respect to the feed direction. The at least one first gripper (See e.g., Specification, page 5, lines 19 to 23, Fig. 2, Reference character 20a) engages the first side edge (See e.g., Specification, page 7, lines 3 to 7, Fig. 4, Reference character 3) of the sheet near the front end of the sheet (See e.g., Specification, page 7, lines 8 to 9, Fig. 4, Reference character 2), the at least one second gripper (See e.g., Specification, page 5, lines 19 to 23, Fig. 2, Reference character 20b) engaging the second side edge of the sheet near the front end of the sheet (See e.g., Specification, page 7, lines 8 to 9, Fig. 4, Reference character 2), the at least one first gripper being mechanically decoupled from the at least one second gripper; wherein the first (See e.g., Specification, page 5, lines 9 to 14, Fig. 2, Reference character 6a) and second (See e.g., Specification, page 5, lines 9 to 14, Fig. 2, Reference character 6b) rail run along the nip.

An electronic control system or circuit 30 is shown in Fig. 1 and described for example at page 4, line 31.

The grippers 20a, 20b may be clamping jaws opened by magnets 43a, 43b (see page 6, line 28) operating against a spring 26 (see page 6, line 30).

## 6. ISSUES

Whether claims 4 and 5 should be rejected under 35 U.S.C. 112, first paragraph.

Whether claims 2, 3, 6, 7, 10 to 14 should be rejected under 35 U.S.C. 103(a) as being unpatentable over Kruger et al (U.S. Patent No. 6,240,843) in view of Spiess (Swedish Patent No. 53,576) and whether claims 8 and 9 should be rejected under 35 U.S.C. 103(a) as being unpatentable over Kruger et al (U.S. Patent No. 6,240,843) in view of Spiess (Swedish Patent No. 53,576), and further in view of DE 4,302,125.

## 7. GROUPING OF CLAIMS

Since the claims do not stand or fall together, the following claim groupings are appropriate:

Group I: Claims 4 and 5 which are dependent from claim 2 and further recite an electronic control system.

Group II: claims 2, 3, 6, 7 and 10 to 14 directed towards a rotary printing press with a sheet transport system comprising two cylinders forming a nip; a first rail configured on one side of a sheet transport path and a second rail configured on the other side of the sheet transport path; and at least one first driven gripper being guided on the first rail and at least one second driven gripper being guided on the second rail, the at least one first gripper and the at least one second gripper pulling a sheet to be conveyed in a feed direction, the sheet having a first side edge, a second side edge and a front end with respect to the feed direction, the at least one first gripper engaging the first side edge of the sheet near the front end of the sheet, the at least one second gripper engaging the second side edge of the sheet near the front end of the sheet, the at least one first gripper being mechanically decoupled from the at least one second gripper; wherein, the first and second rails run along the nip.

Group III: Claims 8 and 9 dependent on claim 14 and further reciting magnets arranged at at least one of an intake area and at an outlet area of the first and second rails for opening the clamping jaws by magnetic force

## 8. ARGUMENTS

### Group I:

Claims 4 and 5 were rejected solely under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This is a written description rejection, and does not assert that the specification is not enabling.

The present invention provides two mechanically decoupled grippers at opposite sides of the sheet.

Claims 4 and 5, as originally filed, recited an electronic control circuit for synchronizing the motion of these two mechanically decoupled grippers, and specifically recited the following:

4 (original): The sheet transport system as recited in claim 1 further comprising an electronic control circuit for synchronizing the motion of the grippers with the rotation of cylinders of the rotary printing press.

5 (original): The sheet transport system as recited in claim 4 wherein the control circuit synchronizes the motion of the grippers which are mounted on different rails and hold a same sheet.

Claims 4 and 5 were once amended to recite:

4. (Previously presented) The rotary printing press with the sheet transport system as recited in claim 1 further comprising an electronic control circuit for synchronizing the motion of the first and second grippers with the rotation of cylinders of the rotary printing press.

5. (Previously presented) The rotary printing press with the sheet transport system as recited in claim 4 wherein the control circuit synchronizes the motion of the first

grippers which are mounted on different rails and hold a same sheet and second grippers.

The changes were to provide proper antecedent basis.

The final office action asserts that "the claimed electronic control circuit for synchronizing the motion of the first and second grippers with the rotation of the rotary printing press does not find proper support in the original disclosure."

However, claim 4 as originally filed clearly supports the electronic control circuit, as does the description of the invention at page 5, line 9 to page 6, line 6 for example. See also MPEP 2163: "There is a strong presumption that an adequate written description of the claimed invention is present when the application is filed."

It seems the Examiner may be asserting an enablement rejection, although this is not specifically stated.

If so, one of skill in the art reading the present specification and claims as originally filed would have clearly understood that electronic control circuit 30 synchronizes the motion of the first and second grippers with the rotation of cylinders of the rotary printing press, i.e. by moving the first and second grippers and the sheet gripped therein as a function of the speed of the printing speed. Page 5, line 28 et seq. for example describes this motion. The specification clearly enables claims 4 and 5.

It is not understood what the exact objection is, as reading of a cylinder rotational speed and electronic control of the speed drive elements 10a, 10b, and thus grippers 20a, 20b, are clearly well within the capabilities of one of skill in the art. The speed of the drive elements clearly is set to pick up the sheets printed by the printing press.

Withdrawal of the rejections to claims 4 and 5 is respectfully requested.

**Group II:**

Claims 2, 3, 6, 7, 10, 11 and 14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kruger et al (U.S. Patent No. 6,240,843) in view of Spiess (Swedish Patent No. 53,576).

Kruger, assigned to the present assignee, discloses a sheet transport system for a rotary printing press, with a first drive element on a first rail and a second drive element on a second rail. The drive elements shown in the figures are held together via a sheet holder having grippers mounted on a cross member, with the grippers engaging a front edge of the sheet.

Spiess discloses a gripper mechanism with side grippers b1, b2. However, in both embodiments grippers b1, b2 clearly are mechanically coupled to each other: as shown in Figs. 1, 2 and 4, the drive wheel c for grippers b1 and wheel d for grippers b2 are coupled together by a cross-gear. (See shaft between c and d in Figs. 2 and Fig. 4).

Claim 2 recites “the at least one first gripper being mechanically decoupled from the at least one second gripper.”

Claim 12 recites a method with the second gripper being mechanically decoupled from the first gripper.

Claim 14 recites the at least one first gripper being mechanically decoupled from the at least one second gripper.”

As stated above, Spiess does not show a gripper mechanism where the grippers b1 and b2 are mechanically decoupled. Rather a cross-gear with a shaft connecting gears c and d mechanically couples the drive wheels c and d for each set of grippers, and thus grippers b1 and b2 are mechanically coupled.

Since neither Spiess nor Kruger shows mechanically decoupled grippers, withdrawal of the rejection to claims 2, 12 and 14 and their dependent claims is respectfully requested.

**Group III:**

Claims 8 and were rejected as being unpatentable over Kruger in view of Spiess and further in view of DE 4302125.



Kruger and Spiess are discussed above.

DE 4302125 discloses that printed sheets 2 are gripped by the leading edge by grips on an endless chain drive 10 to be pulled along the top of the endless drive and down over one end to be laid on a stack. To improve the sheet support additional grips for the sides of each sheet are mounted on a separate endless belt drive 15 which guides the sheets to a stack.

The grippers of DE 4302125 are opened by mechanically, and do not show magnets.

Claim 8 recites "magnets arranged at at least one of an intake area and at an outlet area of the first and second rails for opening the clamping jaws by magnetic force" and it is respectfully submitted that magnets are not shown in the cited prior art references.

The final rejection does not mention magnets at all, and does not address the specific structural limitations of claim 8.

Withdrawal for this reason to claims 8 and 9 in addition to the arguments with respect to claim 2 above is respectfully requested as well.

Respectfully submitted,

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By: 

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## APPENDIX A:

### PENDING CLAIMS 2 to 14 OF U.S. APPLICATION SERIAL NO. 09/696,812

2. (Previously presented) A rotary printing press with a sheet transport system comprising:
- two cylinders forming a nip;
  - a first rail configured on one side of a sheet transport path and a second rail configured on the other side of the sheet transport path; and
  - at least one first driven gripper being guided on the first rail and at least one second driven gripper being guided on the second rail,
  - the at least one first gripper and the at least one second gripper pulling a sheet to be conveyed in a feed direction, the sheet having a first side edge, a second side edge and a front end with respect to the feed direction,
  - the at least one first gripper engaging the first side edge of the sheet near the front end of the sheet, the at least one second gripper engaging the second side edge of the sheet near the front end of the sheet, the at least one first gripper being mechanically decoupled from the at least one second gripper;
  - wherein the first and second rails run along the nip.
3. (Previously presented) The rotary printing press with the sheet transport system as recited in claim 2 further comprising a feeder and a delivery device, wherein the first and second rails run continuously between the feeder and the delivery device.
4. (Previously presented) The rotary printing press with the sheet transport system as recited in claim 2 further comprising an electronic control circuit for synchronizing the motion of the first and second grippers with the rotation of cylinders of the rotary printing press.
5. (Previously presented) The rotary printing press with the sheet transport system as recited in claim 4 wherein the control circuit synchronizes the motion of the first

grippers and second grippers.

6. (Previously presented) The sheet transport system as recited in claim 14 further comprising at least one pair of lagging grippers running on the first and second rails to grip a lagging end of the sheet.

7. (Previously presented) The sheet transport system as recited in claim 6 wherein the lagging gripper pair is braked.

8. (Previously presented) The sheet transport system as recited in claim 14 wherein the first and second driven grippers each include two clamping jaws, and further comprising magnets arranged at at least one of an intake area and at an outlet area of the first and second rails for opening the clamping jaws by magnetic force.

9. (Original) The sheet transport system as recited in claim 8 wherein the clamping jaws are forced together by a spring element.

10. (Previously presented) The sheet transport system as recited in claim 14 further comprising an intake area for the sheet and an outlet area, wherein the first and second rails diverge at at least one of the intake area and the outlet area transversely to the feed direction, in a plane of the transported sheet.

11. (Previously presented) The rotary printing press with the sheet transport system as recited in claim 2 wherein the first and second grippers hold the sheet in an area of the sheet that extends beyond a width of the cylinders.

12. (Previously presented) A method for transporting a sheet having a front edge and a first side edge and a second side edge in a rotary printing press comprising:

gripping the first side edge near the front edge with a first gripper;

gripping the second side edge near the front edge with a second gripper mechanically decoupled from the first gripper; and

moving the first and second grippers on rails configured on both sides of a sheet transport path so as to move the sheet along the sheet transport path.

13. (Original) The method as recited in claim 12 further comprising gripping the first side edge at a rear of the sheet with a third gripper.

14. (Previously presented) A sheet transport system for a rotary printing press comprising:

a first rail configured on one side of a sheet transport path and a second rail configured on the other side of the sheet transport path; and

at least one first driven gripper being guided on the first rail and at least one second driven gripper being guided on the second rail,

the at least one first gripper and the at least one second gripper pulling a sheet to be conveyed in a feed direction, the sheet having a first side edge, a second side edge and a front end with respect to the feed direction,

the at least one first gripper engaging the first side edge of the sheet near the front end of the sheet, the at least one second gripper engaging the second side edge of the sheet near the front end of the sheet, the at least one first gripper being mechanically decoupled from the at least one second gripper.